

JPRS 75149

15 February 1980

Worldwide Report

TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

No. 108

FBIS

FOREIGN BROADCAST INFORMATION SERVICE

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Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

| | | | | |
|---|--|--|----|------------------------------|
| REPORT DOCUMENTATION PAGE | | 1. REPORT NO. JPRS 75149 | 2. | 3. Recipient's Accession No. |
| 4. Title and Subtitle WORLDWIDE REPORT: TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT, No. 108 | | 5. Report Date 15 February 1980 | | |
| 7. Author(s) | | 6. | | |
| 9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201 | | 8. Performing Organization Rept. No. | | |
| 12. Sponsoring Organization Name and Address As above | | 10. Project/Task/Work Unit No. | | |
| | | 11. Contract(C) or Grant(G) No. (C) (G) | | |
| | | 13. Type of Report & Period Covered | | |
| | | 14. | | |
| 15. Supplementary Notes | | | | |
| 16. Abstract (Limit: 200 words) This serial report contains information from the world press and radio relating to worldwide political, economic and technical developments in telecommunications, computers, and satellite communications. Coverage will be worldwide with focus on France, Federal Republic of Germany, United Kingdom, Italy, Japan, the USSR, People's Republic of China, Sweden, and the Netherlands. | | | | |
| 17. Document Analysis a. Descriptors Worldwide Computers Satellite Communications Electronics and Electrical Engineering Telecommunications Telemetry b. Identifiers/Open-Ended Terms c. COSATI Field/Group 09B, C, F, 17B, 22B | | | | |
| 18. Availability Statement Unlimited Availability Sold by NTIS Springfield, Virginia 22161 | | 19. Security Class (This Report) UNCLASSIFIED | | 21. No. of Pages 75 |
| | | 20. Security Class (This Page) UNCLASSIFIED | | 22. Price |

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WORLDWIDE REPORT
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SATELLITE STATION TO LINK BANGLADESH, BURMA, NEPAL

Dacca THE BANGLADESH TIMES in English 25 Jan 80 pp 1, 12

[Text]

CHITTAGONG, Jan 24:—The Telegraph and Telephone Board has worked out a scheme to set up a new satellite station in Dacca at a total cost of Taka 8 crores.

This was disclosed by the Chairman of Telegraph and Telephone Board Mr A.B.M. Taher at opening ceremony of Chittagong Singapore direct telephone circuit here this morning.

The T&T Chairman said that this satellite station would go into operation by the end of the current year. This station which is smaller in size would be substitute to Betbunia satellite station of Chittagong he added.

Mr A.B.M. Taher disclosed that Dacca satellite station would connect Bangladesh with the neighbouring countries—Burma and Nepal—by direct circuit telephone. The Betbunia satellite station is not at present capable to link these two neighbouring countries by telephone because of smaller size of receiving satellite station

he added.

Mr Taher said that the machinery of Betbunia satellite station would be changed and replaced by the end of this year to suit the new satellite to hover over Indian Ocean. The Government, he said, has placed Taka 450 crore at the disposal of the T&T Board for replacement of Betbunia satellite station machinery. The Chairman also disclosed that the T&T is expecting financial help from Canada for the development of Betbunia satellite station.

Referring to the telephone service in Chittagong district Mr. Taher said that more telephone exchanges would be set up here in addition to present three to cope with the increasing demand of telephone subscribers.

Earlier the T&T Board Chairman opened the Chittagong—Singapore direct telephone circuit with a telephonic conversation with Brigadier Yusuf Trade Commissioner of Bangladesh in Singapore.

CSO: 5500

WORLDWIDE AFFAIRS

PAKISTAN, IRAN TO IMPROVE COMMUNICATION LINKS

BK161445 Hong Kong AFP in English 1433 GMT 16 Jan 80 BK

[Text] Karachi, 16 Jan (AFP) --Pakistan and Iran would shortly improve telecommunication links between the two Muslim nations, neighbouring the Soviet Union and Afghanistan, Seyyed 'Ali Musavi Garmarudi, Iran's undersecretary for post, telephone and telegraph said here today.

Mr. Garmaroudi, who arrived here from a tour of Bangladesh last night, told a press conference at the Iranian consulate that the telecommunication links between Iran and Pakistan required improvement and greater dependability in view of the fast developments in the region.

The Iranian official said he would discuss these matters with his Pakistani counterparts in Islamabad.

He said Iran was following a truly independent and non-aligned policy under the leadership of Ayatollah Khomeyni. This was the reason that Iran did not accept the Soviet offer for military aid nor requested the Soviets to veto the United States resolution in the Security Council, calling for economic sanctions against Iran, Mr. Garmarodi added.

He said: "Iran is firm on its demand about the deposed shah's repatriation," the Iranian Government would also hold trials of the American hostages for alleged spying at an appropriate time.

CSO: 5500

'PANAMERICANA' NEW RADIO TRANSMISSION NETWORK

[Editorial Report] PY281818 La Paz Radio Panamericana on 6035 KHZ in its Radio Panamericana network in Spanish at 1700 GMT on 26 January 1980 reported the following:

"Beginning in March, or April at the latest, Panamericana will form part of a radio transmission which will be heard simultaneously in Europe and Latin America. It is the Euroamerican Radio Broadcasting Network with its transmission center in the Spanish capital of Madrid.

"The first meeting of representatives of the main European and Latin American radio stations took place in November 1978 when the idea of creating the first network of this type was considered. A few days ago the second meeting took place in Bogota, Colombia, where representatives of Spanish-European and of the most important radios in our hemisphere were present.

"The network will be called CREA and will be formed by stations that have signed the agreement in the following countries: Mexico, Santo Domingo, Venezuela, Colombia, Brazil, Peru, Chile, Uruguay, Argentina, Paraguay and Bolivia.

"The network will be broadcast daily by telephone via satellite and will last 15 minutes. The network will cover European and Latin American news. Each CREA member station will be able to call the center in Madrid by phone to include in the program the news it considers to be of international importance. This way the reports will be heard both in Europe and Latin America with the speed required for late news.

"After a national and international opinion poll, Radio Panamericana was selected to represent Bolivia in the network. This is an honor for us as our prestige has gone beyond our borders.

"Moreover another multilateral agreement was signed at the Bogota meeting creating correspondents among the radios that make up the Euroamerican network; beginning today Radio Panamericana has direct correspondents in Germany, Spain, Mexico, Argentina, Venezuela, Colombia, Peru, Ecuador,

Uruguay, Brazil and Paraguay. With this service our newscast will have direct reports which may come from Mainland China, Moscow, Iran, Africa or from any other part of the world. Panamericana wishes to fulfill such a service with new programs, which will be of interest to our large national audience."

Note: Radio Panamericana did not specify the time the network will be broadcast.

CSO: 5500

BRIEFS

U.S.-PRC COMMUNICATIONS DISCUSSIONS--Beijing, 24 Jan (XINHUA)--Dr Frank Press, science and technology adviser to the U.S. President said here today that the United States and China had under discussion "the construction and launching of a broadcast and communications satellite." He was speaking at a press conference held here prior to his departure for home after attending the first meeting of the Sino-U.S. joint commission on cooperation in science and technology. He is the American co-chairman of the commission. "We are in the stage of getting specific about the details, specifications and the nature of that kind of satellite and I believe very soon the Chinese will be talking to the American manufacturing companies as a next step toward the acquisition and launching of such a satellite," Dr Press said. [Excerpts] [OW241686 Beijing XINHUA in English 1554 GMT 24 Jan 80 OW]

ETHIOPIAN-ROMANIAN RADIO ACCORD--At a ceremony in Addis Ababa today, the radio and television services of Ethiopia and Romania signed a cooperation agreement on program exchange and personnel training. [LD260538 Addis Ababa Domestic Service in Amharic 1700 GMT 25 Jan 80 LD]

SUBMARINE LINK WITH EUROPE--Nigeria will have a submarine link with Europe via the Ivory Coast in the month of April when the present installations will become operational. Nigeria, which uses the international satellite network for the moment, will thus have another means of international communication. [AB281915 Paris AFP in French 1426 GMT 28 Jan 80 AB]

TV COOPERATION WITH CSSR--Baghdad, 29 Jan--The Iraqi Radio and Television General Organization signed a cooperation protocol here today with the Czechoslovak television organization. The protocol provides for the exchange of movies and special programming on the occasion of national days, the participation in festivals organized by Czechoslovak television and the exchange of expertise in program production. [Text] [JN291737 Baghdad INA in Arabic 1650 GMT 29 Jan 80 JN]

SVR-USSR RADIO-TV AGREEMENT--Hanoi, 30 Jan VNA--An agreement on radio and television cooperation between Vietnam and the Soviet Union was signed here today by Tran Lam, alternate member of the Communist Party of Vietnam Central Committee and chairman of the Vietnam radio and television commission, and S. G. Lapin, member of the Communist Party of the Soviet Union Central

Committee and chairman of the state committee of the USSR for television and radio. The signing ceremony was witnessed by Hoang Tung, member of the VCP Central Committee and head of the party commission for propaganda and education; Dao Tung, general director of the Vietnam News Agency; a representative of the Foreign Ministry and a representative of the Soviet Embassy. Also today, S. G. Lapin called on the Vietnam Radio and Television Commission, where he was warmly welcomed in a meeting by Tran Lam and Le Quy, respectively chairman and vice-chairman of the commission, and employees. [Text] [OW302030 Hanoi VNA in English 1821 GMT 30 Jan 80 OW]

CNA-PERU NEWS AGENCY AGREEMENT--Taipei, 26 Jan (CNA)--The Central News Agency of the Republic of China and the Andina News Agency of the Republic of Peru signed an agreement Saturday in Taipei to exchange news items and step up cooperation. The agreement was signed by Frank C. C. Lin, president of the Central News Agency (CNA), and Oscar Torres Llosa, director general of the information bureau of Peru. Speaking at the signing ceremony, Lin said the agreement will promote mutual understanding and cooperation between the peoples of the two countries. It will also strengthen the cooperation between the mass media of the two countries, he added. Torres also stressed that the agreement will promote friendly relations between the two peoples. Dr Ma Hsin-yeh, board chairman of the Central News Agency, delivered a congratulatory speech at the ceremony. Ma is formerly ambassador of the Republic of China to the Republic of Panama. Under the agreement, Andina is authorized to receive and disseminate news stories and information of CNA in Spanish. In return, CNA is authorized to receive and disseminate news stories and information of Andina. New stories of Andina will be transmitted to the CNA through the CNA's office in Lima. [Text] [OW261455 Taipei CNA in English 1415 GMT 26 Jan 80 OW]

CSO: 5500

INTER-ASIAN AFFAIRS

TRUNK LINE OPENED BETWEEN BANGLADESH, NEPAL

Dacca THE BANGLADESH OBSERVER in English 23 Jan 80 p 12

[Text] Direct trunk line between Dacca and Kathmandu; the capital of Himalayan Kingdom of Nepal; was reintroduced on Tuesday according to official sources in Dacca; reports BSS.

The service which will now be available for two hours between 1 p.m. and 3 p.m. will later be extended to six hours from 9 a.m. to 3 p.m.

So long the line was routed via India and other countries. The service will operate through high frequency trunk line.

With Singapore

An additional trunk line circuit between Chittagong and Singapore will be opened on January 24 according to official sources.

Mr Habibullah Khan; Minister for Information and Broadcasting will formally inaugurate the trunk line. The trunk line between the port city and Singapore has been established on demand of the local business community; officials said.

Meanwhile a 24-channel microwave system between Dacca and Rangamati was introduced recently. So long Dacca- rangamati trunk line had worked on physical line.

The reception between Dacca and earth satellite station of Rangamati is expected to be clear and smooth with the switching over to the new system. Microwave system has also been introduced between Rangamati and Chittagong; the sources said.

CSO: 5500

INTER-ASIAN AFFAIRS

TAIWAN TO BEGIN FACSIMILE SERVICE WITH PHILIPPINES, AUSTRALIA

OW041415 Taipei CNA in English 1348 GMT 4 Feb 80 OW

[Text] Taipei, 4 Feb (CNA)--The international fast facsimile service will be available Tuesday with the Philippines and will begin to serve Australia on February 7, the International Telecommunications Administration said Monday.

Fast facsimile service has already been in service with Hong Kong, Singapore, Bahrain and the United States, including New York, Washington, D. C., San Francisco, Miami, New Orleans, Hawaii and Guam. As to other cities in the United States delivery can be made either via U.S. domestic facilities or by mail, the ITA said.

In addition to the forthcoming inauguration of such service with Australia on February 7, the ITA has been trying to have this service extended in a couple months to Argentina, Salvador, Jamaica and Puerto Rico, the ITA said.

For NT dollars 400 a sheet of A4 size (276mm x 193mm) of documents such as legal papers, invoices, graphs with text in all languages can be transmitted in a matter of minutes. Simply take the originals to the ITA business office at No 28 Hanchow S. Rd, Sec. L. Taipei for immediate transmission, the ITA noted.

CSO: 5500

INTER-ASIAN AFFAIRS

BRIEFS

JAPAN LOAN TO INDIA--India and Japan today exchanged notes on a Japanese loan of 2.7 billion yens (Rs. 9.2 crores) for a telecommunication project. [Text] [Madras THE HINDU in English 15 Jan 80 p 13]

CSO: 5500

BRIEFS

TELECOMMUNICATIONS OFFICE IN PHNOM PENH--In order to mark the first anniversary of the great 7 January victory, on 3 January the Ministry of Communications and Posts held a ceremony to open the Phnom Penh municipal posts and telecommunications office in the presence of Comrade Neou Samon, minister of social affairs, representing the KNUFNS president. Attending this ceremony were Comrade Kim Tiep, assistant to the minister of posts and communications; Comrade Tiv Yao, vice president of the Phnom Penh People's Revolutionary Committee; [words indistinct]; as well as cadres of various central ministries and departments and cadres and personnel of the Ministry of Posts and Communications. Also attending the ceremony were Comrade (Ngi Ba), vice minister of Vietnam's Ministry of Posts and Telecommunications, and many Vietnamese experts. [Excerpt] [BK121026 Phnom Penh Domestic Service in Cambodian 1200 GMT 4 Jan 80 BK]

CSO: 5500

MONGOLIA

BRIEFS

TRANSPORT, COMMUNICATIONS--Ulaanbaatar, 9 Jan--A new step in the development of Mongolia's transport and communications will be made in 1980 and 275.8 million tugriks have been earmarked by the state for the development of this branch of the economy. This year it is planned to build radio relay lines in four aymags, expand automatic telephone exchanges in Ulaanbaatar, Suhbaatar, Dzuunmod and Olgiy, and complete the construction of the automobile repair and service station in the capital. [Ulaanbaatar MONTSAME in Russian 1823 CMT 9 Jan 80 OW]

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

VISIT TO BEIJING LONG DISTANCE TELEPHONE BUILDING

OW260105 Beijing Radio in Mandarin to Southeast Asia 0900 GMT 25 Jan 80 OW

[Report on a visit to the Beijing Long Distance Telephone Building]

[Text] The Beijing Long Distance Telephone Building is the first relatively large microwave long distance telephone communications center in China. Since it was officially commissioned 3 years ago, this communications center has maintained normal operation of its equipment as well as smooth and steady operation of its communications channels. It has also been responsible for connecting both domestic and overseas long distance calls and transmitting domestic press redophotos, television programs and data radiophotos.

Installed in this magnificent building of some 20,000 square meters floor space are 1,800-channel [words indistinct] carrier-wave transmitter, 960-channel transistorized microwave transmitter, [words indistinct] automatic cross-bar long distance switching system, simplified [words indistinct] long distance switching terminal, and a television program (transmitter). All this telephone equipment is relatively sophisticated.

While accompanying us on our visit, the chief engineer of the Long Distance Telephone Bureau told us: This equipment was developed by workers and scientific and technical personnel of the posts and telecommunications department in China after many years of hard work. It represents the achievements and development in scientific research and industrial production in posts and telecommunications of our country.

In old China, no scientific personnel was engaged in telecommunications research and no industry was engaged in manufacturing telecommunications equipment. Since the first telephone installed by foreigners appeared in Beijing in 1900, all equipment had to be imported. The operation room of the telephone bureau was called "the international fair" at that time.

When the Liberation Army entered Beijing and representatives of the People's Government took over the telephone bureau in January 1949, there were only a few (single-channel) carrier-wave transmitters in the long distance operation room. Only about 100 channels could be operated in long distance communications. New China began developing its telecommunications on such a weak foundation.

We went up to the third floor and entered a bright and spacious room, where many neatly dressed young operators were sitting in rows of tens at neatly arranged switching boards. Wearing headphones and holding microphones, they were calling softly: "Nanning," "Changchun," "Lhasa," or "Chongqing." This was the domestic long distance station.

The 1,800-channel [words indistinct] cables are the main carrier-wave communications line linking major cities located along the line connecting Beijing, Shanghai and Hangzhou. This communications line enables several thousand subscribers in major cities along the line to communicate with each other by telephone simultaneously. At present, an automatic and semiautomatic long distance dialing service through this communications line is made available to subscribers in Beijing, Tianjin, Shijiazhuang, Jinan, Hefei, Nanjing, Shanghai and Hangzhou. Some of the subscribers in these cities can now make long distance calls by direct dialing just as if they were calling other subscribers in the same city. In general, it takes only about 10 seconds to have lines connected.

Installed in the last operation room on the same floor is electronic automatic recording equipment, which is capable of accurately recording locations, dates, fees and areas of long distance calls made by these subscribers.

Other subscribers in these eight cities can make semiautomatic long distance calls by dialing the long distance station. This is also a very convenient way of making long distance calls. The leader of the operators on duty told us: Since this line was put into operation, efficiency in service has been greatly improved. At present, though the number of subscribers who can make automatic long distance calls is still limited, long distance calls actually made have increased, considerably totaling almost half of the calls made between subscribers in these cities.

[OW260130] In the microwave control room on the eighth floor, signal lights on the central control board are shining and flashing. They are flanked by color TV equipment transmitting video programs. Operators on duty are conscientiously taking care of them. Video signals transmitted by the central TV station are first processed by the microwave receiving and transmission equipment and many switch facilities here must be brought into the microwave system before they can be relayed to the motherland's cities, townships and countryside and all the other

places in the world via satellites in the skies, cables under the ground or the microwave relay stations on the ground surface. The transmission of video programs in China today is handled by the central microwave control center here and over 250 microwave pivotal and relay stations in 26 provinces, municipalities and autonomous regions. Colorful local video programs must also be transmitted to Beijing for switching, via this microwave transmission system. The microwave operations room here is also connected with two satellite earth stations and can exchange video programs with other countries in the world via the international communications satellites over the Pacific and the Indian Ocean.

Microwave communications is a modern communications instrument. Since the late 1950's, Chinese scientific workers in the posts and telecommunications field have been carrying out research work in microwave communications. After surmounting difficulties, they successfully researched and produced 60-channel microwave transmitters in 1962, thus opening up China's first microwave channel between Beijing and Tianjin. In 1966 they researched and produced electron tube 600-channel microwave equipment and laid the foundation for the development of China's large-volume microwave communications. In 1975, they again successfully researched and produced a complete set of transistorized 960-channel microwave equipment and set up a microwave communications network linking 26 provinces, municipalities and autonomous regions in the country. At present, in addition to video programs, the microwave system centered at the Beijing Long Distance Telephone Building also transmits radio broadcasts and telephone calls to more than 10 cities at home and abroad. In addition it also transmits press radiophotos from Beijing to more than 10 cities, including Chengdu, Guangzhou, Nanning and Kunming, so that the people in remote areas can read the central authorities' newspapers in good time.

The Beijing Long Distance Telephone Building is the domestic and international communications center of our country. It is designed with multichannelization and systematization as its goal. After all the equipment is installed, it will have 30,000 channels; 10,000 channels will be from terminals to Beijing, and the other 20,000 channels will be connected with other places. In international communications, it will maintain ties with the communications network of other countries and regions in the world directly or via satellite, except for a few countries. Along with the development of cable and microwave communications, some other big cities in our country will also set up pivotal communications stations. At that time a modern communications network can be gradually set up, under which an automatic and semiautomatic long distance dialing service between Beijing and China's major cities will be available. The service of video transmission, telephone facsimile transmission of pictures, economic data, and personal messages in writing, broadcasts, meteorological data transmission and video and telephone meetings will then be more rapidly developed.

CSO: 5500

'BEIJING RADIO' REVIEWS LONG DISTANCE TELEPHONE SERVICE IN PRC

OW260105 Beijing Radio in Mandarin to Southeast Asia 0900 GMT 25 Jan 80 OW

[Report on a visit to the Beijing long distance telephone building]

[Text] The Beijing long distance telephone building is the first relatively large microwave long distance communications center in China. Since it was officially commissioned 3 years ago, this communications center has maintained normal operation of its equipment as well as smooth and steady operation of its communications channels. It has also been responsible for connecting both domestic and overseas long distance calls and transmitting domestic press redophotos, television programs and data radiophotos.

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The 1,800-channel [words indistinct] cables are the main carrier-wave communications line linking major cities located along the line connecting Beijing, Shanghai and Hangzhou. This communications line enables several thousand subscribers in major cities along the line to communicate with each other by telephone simultaneously. At present, an automatic and semiautomatic long distance dialing service through this communications line is made available to subscribers in Beijing, Tianjin, Shijazhuang, Jinan, Hefei, Nanjing, Shanghai and Hangzhou. Some of the subscribers in these cities can now make long distance calls by direct dialing just as if they were calling other subscribers in the same city. In general, it takes only about 10 seconds to have lines connected.

Installed in the last operation room on the same floor is electronic automatic recording equipment, which is capable of accurately recording locations, dates, fees and areas of long distance calls made by these subscribers.

Other subscribers in these eight cities can make semiautomatic long distance calls by dialing the long distance station. This is also a very convenient way of making long distance calls. The leader of the operators on duty told us: Since this line was put into operation, efficiency in service has been greatly improved. At present, though the number of subscribers who can make automatic long distance is still limited, long distance calls actually made have increased, considerably totaling almost half of the calls made between subscribers in these cities.

In the microwave control room on the eighth floor, signal lights on the central control board are shining and flashing. They are flanked by color TV equipment transmitting video programs. Operators on duty are conscientiously taking care of them. Video signals transmitted by the central TV station are first processed by the microwave receiving and transmission equipment and many switch facilities here must be brought into the microwave system before they can be relayed to the motherland's cities, townships and countryside and all the other places in the world via satellites in the skies, cables under the ground or the microwave relay stations on the ground surface. The transmission of video programs in China today is handled by the central microwave control center here and over 250 microwave pivotal and relay stations in 26 provinces, municipalities and autonomous regions. Colorful local video programs must also be transmitted to Beijing for switching, via this microwave transmission system. The microwave operations room here is also connected with two satellite earth stations and can

exchange video programs with other countries in the world via the international communications satellites over the Pacific and the Indian Ocean.

Microwave communications is a modern communications instrument. Since the late 1950's, Chinese scientific workers in the post and telecommunications field have been carrying out research work in microwave communications. After surmounting difficulties, they successfully researched and produced 60-channel microwave transmitters in 1962, thus opening up China's first microwave channel between Beijing and Tianjin. In 1966 they researched and produced electron tube 600-channel microwave equipment and laid the foundation for the development of China's large-volume microwave communications. In 1975, they again successfully researched and produced a complete set of transistorized 960-channel microwave equipment and set up a microwave communications network linking 26 provinces, municipalities and autonomous regions in the country. At present, in addition to video programs, the microwave system centered at the Beijing long distance telephone building also transmits radio broadcasts and telephone calls to more than 10 cities at home and abroad. In addition it also transmits press radiophotos from Beijing to more than 10 cities, including Chengdu, Quangzhou, Nanning and Kunming, so that the people in remote areas can read the central authorities' newspapers in good time.

The Beijing long distance telephone building is the domestic and international communications center of our country. It is designed with multi-channelization and systematization as its goal. After all the equipment is installed, it will have 30,000 channels. Of these, 10,000 channels will be from terminals to Beijing, and the other 20,000 channels will be connected with other places. In international communications, it will maintain ties with the communications network of other countries and regions in the world directly or via satellite, except for a few countries. Along with the development of cable and microwave communications, some other big cities in our country will also set up pivotal communications stations. At that time a modern communications network can be gradually set up, under which an automatic and semiautomatic long distance dialing service between Beijing and China's major cities will be available. The service of video transmission, telephone facsimile transmission of pictures, economic data and personal messages in writing, broadcasts, meteorological data transmission and video and telephone meetings will then be more rapidly developed.

CSO: 5500

PRC TELECOMMUNICATIONS SERVICE TRIES OUT QUALITY CONTROL METHOD

OW231651 Beijing XINHUA in English 1515 GMT 23 Jan 80 OW

[Text] Beijing, 23 Jan (XINHUA)--Errors in telecommunications service can be detected with ten times more accuracy by a new total quality control method, called shift-type quality control charts.

Developed by Zhang Gongxu, an associate professor of the Beijing Posts and Telecommunications Institute, the method proved its value in trials. It can be applied in other industrial fields.

Liu Yuanzhang, vice-president of the Chinese Duality Control Society and a research fellow at the Systems Science Institute under the Chinese Academy of Sciences, has commented that this new type of charts advanced the theory of quality control.

The new shift-type control charts include a chart that can pinpoint whether delays in long-distance telephone service are due to overcrowding of lines, faulty equipment or poor service attitude by the operator.

The traditional quality control chart innovated by an American scholar named W. A. Shewhart back in 1924 has been improved by Japan and other industrial nations and been proven useful in industrial production. It failed, however, to meet the requirements of the posts and telecommunication service, where the amount of work and social demands placed on it vary at different times.

Zhang Gongxu was graduated from the Shanghai Jiaotong University in 1953. He became a teacher of the Beijing Posts and Telecommunications Institute in 1955 and started research on the reliability theory and quality control in 1957.

He published an essay "Reliability Theory and Network of Posts and Telecommunications" in 1960 in the transaction of the Beijing Institute of Posts and Telecommunications. In this essay, he proposed three reliability

calculating methods, namely the cut set method, the pseudo-network method and the equivalent network method. Scholars in other countries presented similar proposals [word indistinct] and 15 years later, he is now on the board of directors of the reliability and quality control society under the Chinese Electronics Society.

CSO: 5500

INTERNATIONAL AFFAIRS

RADIO-TELEVISION PROTOCOL SIGNED BY YUGOSLAVIA, ALBANIA

AU131500 Tirana Domestic Service in Albanian 1345 GMT 13 Jan 80 AU

[Text] The talks held between the Albanian and Pristina radio-television delegations on cooperation between the two institutions in various fields were concluded in Pristina yesterday. On the occasion, a protocol on cooperation between the two institutions for 1980 was signed. Cajup Rusmali, general director, signed the protocol for the Albania radio-television. Riza Alaj, general director, signed for the Pristina radio-television. In addition to the delegations, the signing ceremony was attended by Nesiät Islami, the regional secretary for information, and others.

Also yesterday morning the delegation of the Albanian radio-television, led by Cajup Rusmali, was received by Ymer Jaka, regional secretary for education, science and culture. Attending were Riza Alaj, general director of the Pristina radio-television; Vojislav Okiluevic, deputy regional secretary for education, science and culture; Shaban Hyseni, director of the Pristina radio; Fahredin Gunga, director of the Pristina television; and others.

Also attending the signing ceremony of the protocol and the reception given by the regional secretary for education, science and culture was Sokrat Plaka, ambassador extraordinary and plenipotentiary of the People's Socialist Republic of Albania to Yugoslavia.

CSO: 5500

INTERNATIONAL AFFAIRS

BRIEFS

HUNGARY-GDR RADIO COOPERATION--A working plan on cooperation between the GDR and the Hungarian radios in 1980-81 has been signed by Rudi Singer, chairman of the GDR radio, and Istvan Hars, chairman of Hungarian radio. The exchanges of popular programs and the joint production of programs will continue in the future, and special attention will be paid to the anniversary of liberation from fascism, the two party congresses and national days. [Budapest Domestic Service in Hungarian 1730 GMT 11 Jan 80 LD]

CSO: 5500

CZECHOSLOVAKIA

BRIEFS

CTK-UPI AGREEMENT--London, (CETEKA correspondent)--Dr Otakar Svercina, director general of the Czechoslovak News Agency CETEKA, and UPI Vice President Julius B. Humi signed here today an agreement on exchanges of news items and photos. The new agreement provides better conditions for mutual cooperation of the two agencies, and for exchange of know-how in the use of electronic equipment and computers in agency work. [Text] [Prague CTK in English 2005 GMT 24 Jan 80 LD]

CSO: 5500

INTER-AMERICAN AFFAIRS

BRIEFS

TV REPEATER STATIONS--The provincial television network has provided the Province of Santa Cruz with new repeater stations in Perito Moreno, Gobernador Gregones and Calafates. Repeaters will also be established in Los Antiguos and Jaramillo in the near future. [PY222135 Buenos Aires Domestic Service in Spanish 22 Jan 80 PY]

CSO: 5500

ARGENTINA

NATIONAL SATELLITE COMMUNICATION SYSTEM TO OPERATE IN 1982

Buenos Aires CLARIN in Spanish 19 Dec 79 p 37

[Text] "Our country will soon have its own satellite communication system," the State Secretariat of Communications [SECOM] announced yesterday as it released information concerning a resolution signed by Gen Eduardo Corrado, state secretary of communications.

The measure authorizes the National Telecommunications Enterprise [ENTEL] to carry out the above mentioned project, officially called "Plan Soberania" [?Sovereignty Plan].

SECOM pointed out in this regard that "the completion of this ambitious plan will give the country alternate routes for its southern microwave trunk line (to Ushuaia) and the northern one (to Campor Duran). In addition, for towns which at this time the ENTEL is not planning to include in its national network it will provide by 1985, the "possibility of receiving television programs and of maintaining telephone and telegraph traffic with the rest of the country." For this purpose, it was added, the first thing will be to rent a "transponder through Intelsat V-A," it being planned that by 1982 Plan Soberania will be ready to be put permanently into operation.

Finally the Secretariat of Communications disclosed that the work is already "in its first stage of execution" and "will require an outlay of approximately \$20 million." In the general order, a substantial expansion of the program has been laid out which will allow complete coverage of the country with the advantages of the national telecommunications system.

In a ceremony which took place yesterday 40,000 telephone lines were put into service in the exchanges of Alvarez Thomas and Coghlan, constructed by ENTEL to meet the demand for service in these areas and to relieve the congestion of the Belgrano section.

Gen Eduardo Oscar Corrado presided over the ceremony which took place at the main exchange, Washington 1276, and during its course Col Luis Alberto Amallo, manager of the state enterprise, made a speech to summarize the achievements during the year that is coming to a close. "In our communications work we

have accomplished a great deal: the record figure of 205,270 lines, distributed among 60 urban exchanges, were put into service during the year, at an average of one per week, equivalent to 562 lines per day," he said.

He pointed out that "to put an end to the lack of communication among rural inhabitants the plan for rural telephones was implemented. It is already showing results in Salto, province of Buenos Aires." "The new technology," he added, "is being used in the ENTEL projects, proof of which is the optical fiber system which already interconnects the exchanges of Burzaco and Androque."

He mentioned the auspicious fact that "we now estimate that we will register 15 million minutes of international telephone communications by the end of this year, this being further evidence of the true adequacy of the service." "But our efforts do not end there; we are continuing," he asserted, "to increase the operating capacity of the interurban automatic exchanges where 1,182 new lines, 29 radioclinic systems, 70 carrier wave systems and 45 multiple telegraph systems have been installed, also 1,320 telex lines in 26 electronic technology central exchanges."

According to Col Luis Amallo, new buildings with 32,295 square meters of space have been constructed, and soon to be constructed are others with 139,567 square meters, the equivalent of a development with 1,395 residences.

The Alvarez Thomas central exchange numbers are 551 and 552 and the Coghlan exchange numbers are 541 and 542.

9204

CSO: 5500

'CONVICCION' EXAMINES PROPOSED NEW RADIO BROADCASTING LAW

Buenos Aires CONVICCION in Spanish 29 Dec 79 p 9

[Text] Although it was conceived under the principle of an auxiliary role for the national government the proposed law on radio broadcasting reserves for the official sector a considerable amount of radio broadcasting activity since it will make it possible, not only for the national government, but also for the provinces and municipalities to own broadcasting stations.

This is not the case with television stations of which there will be only one belonging to the government, located in the federal capital.

This is one of the most striking features of what has been revealed about the future legal instrument which is destined to regulate this activity; at this moment the bill is being studied by the private sector which, as is known, has requested an extension of the time it has been granted for this study, NOTICIAS ARGENTINAS reported yesterday:

Broadcasting Stations For Provinces

According to the bill provinces and municipalities may provide--after authorization by the chief executive of the country--up to one AM (amplitude modulation) radio station and also up to one FM (frequency modulation) radio station although in the latter case it will be a required condition that it is not being provided by private enterprise.

Without prejudice to this setup, the Official Radio Broadcasting Service (SOR), will also operate. Its basic network will consist of one radio and one television broadcasting station in the federal capital and one radio broadcasting station in each province of the country and in the National Territory of Tierra del Fuego.

The SOR will also be comprised of a number of radio broadcasting stations which will operate in support of the private stations, when this is required by national security.

The plan implies--although the bill obviously does not provide for it--turning over to private enterprises commercial radio and TV stations which at the

present time operate under state control in the federal capital and the interior of the country, as well as the subsidiary stations of Radio Nacional which are not to be incorporated into the SOR.

To implement this a period of 36 months is allowed starting on the date when the national plan for radio broadcasting is approved, an approval which in turn should be granted within 150 days of the time when the law being prepared is put into force.

The Ownership and Use of Receivers Will Not Be Taxed

The bill maintains, in addition, the principle of free reception of the broadcasts by specifying that the ownership and use of receivers will be exempt from all charges.

Regarding the content of broadcasts, the law states that they should contribute to the common good and to the strengthening of national unity, should serve to enrich culture, foster the exercise of the natural right of man to communicate, promote the participation of the entire population in the achievement of national objectives and contribute to the development of feelings of international friendship and cooperation.

The proposed law makes obligatory the use of Spanish in broadcasts--although it does not allow certain exceptions--and proposes also the dubbing in of foreign films or serials by Argentine professionals.

It also provides that the broadcasts must not invade personal privacy and in no case may broadcasts be made of programs categorized as forbidden for children under 18 years old.

Veracity and Objectivity of Information

Regarding the handling of information it is required that it be truthful and objective and its content and the manner in which it is expressed should avoid producing public unrest or collective alarm.

It is also proposed that programming preferably include the works of national authors and performances by Argentine artists, and programs or broadcasts of partisan politics on government stations are forbidden.

The government radio broadcasting stations may carry--according to the bill--institutional advertising and if its financial needs make it necessary, also a limited amount of non-institutional advertising.

These revenues shall be added, for the support of the SOR, to those proceeding from the national general budget and those accruing from a special tax which will be levied on the private sector of radio broadcasting, in proportion to the amount billed.

licenses for the operation of private broadcasting stations will be granted by the executive branch of the national government through public bids for an initial period of 15 years; for stations located in border or developing areas it will be 20 years. In either case there can be a 10 year extension, on a one-time basis.

Moral Quality, Cultural Suitability and Patrimonial Capacity

The bill also contains precise requirements as to the moral quality, cultural suitability and patrimonial capacity which those licensed must meet. They must not be owners or partners in any other radio broadcasting enterprise, nor of national or foreign newspaper enterprises nor have legal or economic relationships with such enterprises when this would constitute a situation of information monopoly.

Being a judicial magistrate, a legislator, a public official, a clerical dignitary with a parish or being a military man or security agent on active duty is considered to be incompatible with holding a license or being a member of a company which controls a station.

The companies which are formed for the exercise of licenses may not be branches or subsidiaries nor can they be controlled or managed by physical or juridical persons who are foreigners; the partners will be physical persons and not more than 20 in number, and there will be no transfers or ceding of parts, quotas or shares without the authorization of the Federal Radio Broadcasting Committee.

This body will also approve the appointment of the directors, managers, proxies, administrative directors and attorneys.

Regarding standards for the exercise of licenses the law forbids the transfer or resale of radio time slots and any exclusive relationship with one or more enterprises in the sale of advertisements.

The broadcasting of advertisements will be limited to 14 minutes per hour on radio and 12 minutes per hour on television, it being made clear that institutional messages and promotion of their own station's programs will be considered advertisements in computing these figures.

9204

CSO: 5500

ENTEL NEW TECHNOLOGY EXPANSION REVIEWED

Buenos Aires LA OPINION in Spanish 23 Dec 79 p 10

[Text] ENTEL is one of the state companies which works 24 hours a day and 365 days of the year without its activity being subject either to weather or holidays. Thus its operation is continuous.

Telephony, telex, transmission of data, facsimiles, radiophotos and transmission of signals for television and radio provide the necessary services for almost all the activities of society. To provide these, to maintain the installations and to incorporate new technology is a complex job which according to statements made a few days ago by Col Luis Amallo, the ENTEL head, has been fully accomplished insofar as its goals for this year are concerned.

In addition to putting into service the coastal central exchange this last Thursday, 32,295 square meters of construction were carried out in 1979 in other exchanges where it will be possible to install 153,400 new telephone lines.

In addition, contracts were let for 917,970 lines at a cost equivalent to \$470 million, a task which will continue throughout 1980 while the contracts for the period up to 1984, covering 250,000 lines using existing technology and some 550,000 more using electronic technology brings the total to 1,717,000 lines costing the equivalent of \$980 million.

Regarding public pay telephones--which cause the most anger--all the existing instruments were replaced and 2,050 additional ones were installed. Also a call for bids was made for 17,500 instruments for the 1979-1981 period, which, added to the 22,500 for which contracts have been signed, amounts to \$7,570,000.

It is known that the interurban infrastructure, supported by the high capacity radio hook-ups and coaxial cables, constitutes the backbone of the enterprise. This year radio hook-ups which link a couple of dozen cities with an average of 900 canals each, were added to the already existing network.

9204

CSO: 5500

MISIONES PROVINCE TO RECEIVE NATIONAL TELEVISION

Buenos Aires LA NACION in Spanish 29 Dec 79 p 4 sec 3a

[Text] Posadas. In the presence of Governor Ruben Norberto Paccagnini, Retired Navy Captain, of provincial and national authorities and of special guests, a repeater television station for Channel 3 will be inaugurated in Puerto Iguazu thus completing the government repeater system of Misiones whose main station is LT Channel 12 of Posadas.

In this way the entire Misiones area will be covered by Argentine television counteracting the constant penetration by foreign radio and television channels which is causing concern here.

The procurement and installation of repeaters and microwave relay stations was begun in 1974 although because of various types of problems it was put into operation half-way through 1976 when the government of Misiones made the policy decision to carry out the task using its own resources and with financing by the regional Development Fund (FDR).

A total of three repeaters have been installed: Channel 9 of Dos de Mayo, Channel 13 of Cruce Caballero and the one which is being officially inaugurated in Iguazu: Channel 3. The relay stations of Santa Ana, Campo Grande, Facran, Ruta 17 and Gobernador Lanusse are also in operation.

These projects required a remarkable effort, both human and financial, since at several of the points indicated it was necessary to "carve out trails" to bring in the equipment since they are in the midst of jungle and mountainous country.

It was also reported that the national government has approved the communications plan for the province of Misiones which envisions--among other things--a substantial improvement in the technology of the primary channel of the system (Channel 12 of Posadas), an increase in the potential of LT 17 Radio Provincia with equipment of 50 kilowatts while those that are now in operation, which are of 25 kilowatts, will be sent to LT 46 Radio Bernardo Irigoyen.

In addition, a frequency modulation (FM) station will be put into operation in Posadas. It should be pointed out that the only radio station with this frequency which is now being listened to has its studios in Encarnacion (Paraguay), a city which is located opposite Posadas on the other side of the Parana River.

BRIEFS

ENTEL NEW EXCHANGE--The National Telecommunications Enterprise, ENTEL, will construct as one if its projects a new central exchange in La Carlota, province of Cordoba, and will enlarge the existing ones in Marcos Paz and Ingeniero White, Buenos Aires province. The buildings which will be constructed total 2,378 square meters of internal floor space, with an initial capacity for 2,200 telephone lines and an overall budget of 2,354,285,000 pesos. The central exchange to be built in La Carlota will be located at 868 Velez Sarsfield between Espana and Irigoyen in this city and will have an internal floor space of 1,405 square meters, and at first 1,000 lines will function there. The official budget for this building is 1,097,000,000 pesos. The expansion of the Marcos Paz exchange in Pellegrini and Belgrano of this locality involves 338 square meters of construction to install 1,000 new telephone lines initially, which will later on be increased to 3,000 lines. The budget for this project has been estimated at 586,085,000 pesos. At Ingeniero White 635 square meters of internal floor space will be added to the existing exchange at 3663 Mascarello. Equipment and elements for 200 telephone lines will be installed and 671,200,000 pesos will be invested in the project. Bids will open 21 January for the Ingeniero White project; on 4 February for that of La Carlota and 5 February for that of Marcos Paz. [Text] [Buenos Aires LA PRENSA in Spanish 4 Jan 80 p 4 sec 2] 9204

TV REPEATER STATIONS--The provincial television network has provided the Province of Santa Cruz with new repeated stations in Perito Moreno, Gobernador Gregones and Calafates. Repeated will also be established in Los Antiguos and Jaramillo in the near future. [Buenos Aires Domestic Service in Spanish 22 Jan 80 PY]

INTERNATIONAL TELEPHONE SERVICE--Resistencia, 2 Feb (TELAM)--The National Telecommunications Enterprise (ENTEL) today inaugurated an international communications service in Resistencia. This will enable the provinces of Misiones, Corrientes, Formosa and Chaco to place calls abroad. [Buenos Aires TELAM in Spanish 1758 GMT 2 Feb 80 PY]

CSO: 5500

BOLIVIA

BRIEFS

NEW RADIO STATION--The Transportation Ministry has authorized the General Telecommunications Directorate to grant the firm of La Voz del Cobre Limited a license to operate a radio station. The station will be located in the town of Corocoro, La Paz Department. [La Paz Radio Panamericana Network in Spanish 0000 GMT 30 Jan 80 PY]

CSO: 5500

BRAZIL

BRAZILIAN-U.S. SUBMARINE CABLE TO BE LAID IN 1980

Communications Minister's Announcement

Rio de Janeiro JORNAL DO BRASIL in Portuguese 22 Dec 79 p 6

[Text] Brasilia--Communications Minister Haroldo Correia de Mattos has already informed President Figueiredo that the Brazil-U.S. submarine cable (BRUS) project will be launched in the first half of 1980 and will go into operation in approximately 2 years.

Two U.S. companies, Western Electric and ITT Cable Hydro-Space, are responsible for manufacturing and laying the cable, the pertinent agreement having been concluded in 1975.

Route

The minister justified the delay of this project in ministry channels on the basis of the problems inherent in surveying the route. He said that it has already been carefully selected after a survey group spent several months making submarine soundings and gathering samples from the ocean floor to insure that the cable will follow the safest route on the ocean floor. The BRUS will extend 3,462 miles, its termination in Brazil will be in Fortaleza and it will have two interlinked segments in St Thomas in the Caribbean.

Up to now, communications between Brazil and the United States are operated exclusively by satellite. The BRUS submarine cable will permit the transmission of telephony, telegraphy, television, telex, data, facsimile and other special services.

Ceara Terminal

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 8 Jan 80 p 10

[Text] The beach of Futuro in Fortaleza this morning receives one of the ends of the Brazil-U.S. cable (BRUS) intended for communications between the two countries. The cable ship "Long Lines" of the Trans-Oceanic Cable

Ship Company began laying the cable in the ocean off St Thomas, Virgin Islands and it will be 4,215 kilometers in length on reaching the Brazilian coast.

To celebrate the event, the Brazilian Telecommunications Company (EMBRATEL) organized a special program with the attendance of Minister of Communications Haroldo Correia de Mattos and the president of the company, Helvecio Gilsom. The cable ship "Long Lines" will remain anchored 1.5 kilometers from the beach while the tug brings the end of the cable up to the sand. There, the cable will be connected and then go 8 kilometers on land to the EMBRATEL station where its circuits will later be connected to the communications equipment.

The BRUS cable was the subject of an agreement signed in 1975 by EMBRATEL and U.S. telecommunications companies (ITT, WUI and RCA). The cost of installing it is estimated at \$60 million. The expenses will be divided equally between EMBRATEL and the U.S. companies (50 percent each). At the end terminated in St Thomas there will be a link through already existing cable systems up to Jacksonville, Florida, for the distribution of circuits throughout the United States. At the Brazilian end, once it is connected to the EMBRATEL station in Fortaleza, the cable will be linked to the national communications networks (telephony, telex, telegraphy, data transmission and facsimile. It will permit all but the transmission of television pictures. It is expected to go into operation in August.

8711

CSO: 5400

COMMUNICATIONS MINISTER OUTLINES PROGRAMS FOR 1980

Rio de Janeiro JORNAL DO BRASIL in Portuguese 30 Dec 79 p 8

[Text] Brasilia--Minister of Communications Haroldo Correia de Mattos revealed that in 1980, 350,000 telephone terminals will be ordered from national industry, among them computer-programmed exchanges (CPA's). The first contract will be for 50,000 CPA terminals for Sao Paulo, in pursuance of a program that envisages ordering like quantities from the three companies that will participate in the market: Standard Electric, Ericsson and NEC.

The minister said that the 1980 budget forwarded for the approval of the Planning Secretariat (DEPLAN), totals 68 billion cruzeiros, "the minimum essential to maintain the programs initiated by the ministry," another 8 billion for investment, which is essential for the 350,000 terminal contract. As for the National Telecommunications Fund, he said there is a constant demand that it be fully returned to the sector but "national objectives prevail over sector objectives."

Limits

According to Haroldo Mattos, the limits established in 1979 by the Economic Development Council for the telecommunications sector were \$86.7 million for the import of goods and 593 million cruzeiros for the purchase, renting or commercial leasing of foreign products on the domestic market. He said also that those expenditures amounted to only \$56.5 million and 397 million cruzeiros, respectively, at the end of the fiscal year.

With regard to the development of the quality of telecommunications services, a goal he regarded as a priority for 1980, he cited as an example "the highly successful effort to save the Rio de Janeiro Telephone Company (TELERJ). The company is entering a phase of definite recovery, specifically in terms of customers."

With regard to the addition of new services to the system, he said that in 1980 the ministry will encourage the greater use of public telephones for intercity connections through a specific code to get the operator or through

a telephone credit card. "Obviously, the plan for that credit card is difficult to carry out," said the minister. "The great problem will be to update the list of customers."

The minister believed that "despite the well-known difficulties that affect the country, 1979 was a successful year in the communications area." And he pointed out that in that year the production of the Brazilian standard telephone was begun (touchtone telephone), through a contract with IGB-Control, and 2,000 telephones have already been installed. He pointed out also the contract for the development of an antenna for satellite communications signed with AVIBRAS [expansion unknown], which resulted in the manufacture of 10 antennas seven of which were intended for EMBRATEL to interconnect various points in the Amazon region with the national telecommunications system.

He said that with a view to creating opportunities for national industry and to support it in the development, manufacture and marketing of telecommunications products, he decided that the projects carried out or under development by the TELEBRAS research center in Campinas be transferred to the industry. He revealed also that by the end of this year, 70 absolutely original projects were registered and patented in the Campinas Research Center.

8711

CSO: 5400

TELEBRAS TO ORDER 50 THOUSAND CPA TERMINALS FROM ERICSSON

Rio de Janeiro JORNAL DO BRASIL in Portuguese 7 Jan 80 p 15

[Text] Brasilia--The 50,000 computer-programmed exchange (CPA) terminals which the Brazilian Telecommunications Corporation (TELEBRAS) is going to order for Sao Paulo this year will be contracted with Ericsson. Also in 1980, the NEC will be contracted to supply an order for the Brazilian Telecommunications Company. The third order for CPA terminals is intended for the Rio de Janeiro and Belo Horizonte markets and will be given to Standard Electric but the date has not yet been set.

According to the legal adviser of the Communications Ministry, Helio Estrela, the orders for CPA terminals will respond to two priorities set by the ministry: Market demand and the availability of funds by the companies in the TELEBRAS system.

According to the president of TELEBRAS, General Alencastro e Silva, the intention to maintain the same type of equipment in each Brazilian city is advisable in every sense, including in terms of costs and maintenance. Division of the CPA market is being done according to the investments already made by the companies that have won the bids (Ericsson, Standard Electric and NEC) but, according to General Alencastro, their tradition in the market and acceptance by the customers will also be taken into consideration. Once adopted in a city, the CPA equipment of one company will not be able to be replaced by that of another.

A Computer-Programmed Exchange (CPA) is a computer-controlled and semi-electronic service which, in the first phase, will enable the customer to avail himself of a number of facilities, such as leaving his home and having the telephone programmed to transfer the calls to wherever he may be. With the establishment of the CPA's in Brazil, the customer is going to be able to set his telephone to record messages and to store codes which, when keyed will eliminate the need to dial regularly used numbers. The CPA terminal will also permit the identification of known "crank" connections.

BRAZIL

TELEBRAS CONFIRMS CONTRACT WITH ERICSSON FOR CPA PRODUCTION

Rio de Janeiro JORNAL DO BRASIL in Portuguese 19 Jan 80 p 17

[Text] Brasilia--On 28 December TELEBRAS [Brazilian Telecommunications, Inc.] signed a contract with the Ericsson Company for the manufacture of 50 CPA (Program Storage Centers) terminals for the city of Sao Paulo. Despite the denial yesterday, even by Ericsson Company sources, the president of TELEBRAS himself, Gen Alencastro Silva, confirmed the signing of the contract.

The next order to be made by the state company will be made from NEC (Nippon Electric Company) for the manufacture of the EMBRATEL traffic stations. The plan prepared by the NEC is under study in EMBRATEL and the contract will be signed by July of this year. The Japanese group will also have the orders for the terminal stations of the TELEBRAS System.

It was said in TELEBRAS that it is unlikely that Standard Electric, for whom the market of Rio de Janeiro and Belo Horizonte had been reserved, will get the order because of internal problems. The destination of the orders for the CPA's is being determined according to the investments already made by the companies selected through bids (Ericsson, Standard Electric and NCE) in the consumer market.

Last 16 December a contract was signed whereby the NEC and the Docas de Santos Company formed the National Electronic Company, a joint venture created in November of last year in compliance with a request from TELEBRAS, which initially disqualified the Japanese company in the bidding for the CPA market, using the argument that the capital of NEC was not of national origins.

The signing of that contract gives the Docas do Santos Company the decision-making power in the case of disputes, and it has the majority capital in the joint venture. When the CPA terminals are initially manufactured, they will be 40 to 80 percent nationally manufactured. If the CPA market were equally allocated among the three competitors, each company would have a share of 160,000 lines per year.

The president of the Council of Directors of the NEC of Brazil, Col Higinio Corsetti, said yesterday that the report that he will leave his post in the company and go to manage another in the same group in Rio Grande do Sul is "absolutely unfounded," adding "I can only attribute that report to a mistake, keeping in mind that the National Electronic Company, a joint venture formed by the NEC and the Docas de Santos Company, was created with control remaining with the Brazilian company. It is obvious that the council of directors of that joint venture will be headed by someone from the Docas dos Santos Company."

According to Col Higinio Corsetti, there will be no change in the council of directors of the Multinational NEC, which is active in the area of telecommunications, manufacturing multiplex, KEY systems, PABX, Facsimile, Crossbar and other switching equipment. "I do not know with what purpose it is said that I am leaving the council of directors of the NEC. The NEC is going to continue to be active in the electronic and telecommunications fields."

8908

CSO: 5500

BRAZIL

DATAPREV INSTALLS 200 MINICOMPUTERS PURCHASED FROM COBRA

Rio de Janeiro O GLOBO in Portuguese 15 Jan 80 p 5

[Text] Brasilia (O GLOBO)--The 200 COBRA [Brazilian Computers and Systems, Inc.] minicomputers purchased by the Social Security Data Processing Enterprise (DATAPREV) were already installed at the offices with the greatest activity in Brasilia, Sao Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Curitiba, Fortaleza and Florianapolis.

In the area of supervising collections, those computers will be used for the organization of rolls, company current accounts, more effective supervision over collection agents, issuance of notices, guidelines and so forth.

With respect to the granting of benefits, they will make possible a better control of payments and quicker care for those covered by the social security system.

Pilot tests are being made at two offices: the one at Marques de Abrantes Street in Rio de Janeiro and that of Sao Caetano do Sul in the state of Sao Paulo.

Six minicomputers were installed in Brasilia, which will also provide service to Goias, Mato Grosso, Mato Grosso do Sul, Para, Acre, Amapa, Rondonia and Roraima. The five computers in Fortaleza will service, not only Ceara, but also Maranhao and Piaui. Pernambuco, Alagoas, Paraiba and Rio Grande do Norte will be serviced by the five in Recife and Bahia and Sergipe by the five in Salvador.

There are 21 located in Sao Paulo; 20 in Belo Horizonte; eight in Curitiba, four in Florianopolis and 14 in Porto Alegre.

8908

CSO: 5500

BRAZIL

MAJORITY OF NEC EQUIPMENT NOW PRODUCED DOMESTICALLY

Rio de Janeiro JORNAL DO BRASIL in Portuguese 15 Jan 80 p 20

[Text] Brasilia--The president of NEC (Nippon Electric Company), Col Higinio Corsetti, said yesterday that 95 percent of the equipment manufactured by his company is made domestically. Corsetti pointed out that the NEC is responsible for the initiation of the system of transmissions by EMBRATEL [Brazilian Telecommunications Company] throughout its system of television centers and through its telex exchanges, emphasizing that no one has ever made any complaints about its equipment.

At the dinner NEC held yesterday for Minister of Communications Correa de Mattos at the National Hotel, Col Higinio Corsetti emphasized that the company became the third largest supplier of CPA's (Stored Program Centers) for the country in November of last year.

Present at the dinner was the president of the NEC Council, Koji Kobayashi, decorated last year with the National Order of Cruzeiro do Sul, which according to Col Higinio Corsetti was "an act of acknowledgement for what the NEC has done for Brazil."

According to Colonel Corsetti, conversation at the dinner revolved around the planning of orders to be made by the government during the course of this year.

8908

CSO: 5500

EL SALVADOR

CLANDESTINE ERP RADIO STATION BEGINS OPERATING

First Broadcast

PA232342 Radio Revolucionaria del Pueblo [Clandestine] in Spanish to El Salvador 1630 GMT 22 Jan 80 PA [tentative]

[Text] Salvadoran people: Attention, attention, Salvadoran people: This is Radio Revolucionaria del Pueblo, official voice and instrument of struggle of the Revolutionary People's Army (ERP), broadcasting from somewhere in our heroic fatherland in the year of unity and final liberation.

Salvadoran people, with great joy we announced to you that as of this moment a new instrument of struggle has been constituted. This instrument will strengthen and improve until it becomes an organizing element of our people, permitting a massive involvement of the people in the great tasks of the insurrectional struggle.

Radio Revolucionaria del Pueblo will make it possible to learn and remain informed about our people's revolutionary struggle. Radio Revolucionaria del Pueblo will make it possible to learn the general organizational instructions which it is necessary to understand at a given moment to join the struggle.

Radio Revolucionaria del Pueblo will instruct the people so they learn to respond to the specific tasks of the revolutionary struggle. Radio Revolucionaria del Pueblo will also serve to strengthen the unity process of the forces of the people.

Hail Radio Revolucionaria del Pueblo, which today becomes yet another weapon for our people! Hail Radio Revolucionaria, which will remain on the side of the people in all struggles with the same irrevocable determination of our ERP to fight for the Salvadoran revolution till victory or death.

Broadcast Times Announced

PA290010 Radio Revolucionaria del Pueblo [Clandestine] in Spanish to El Salvador 2030 GMT 26 Jan 80 PA

[Text] This is Radio Revolucionaria del Pueblo, official organ and instrument of struggle of the Revolutionary People's Army (ERP), broadcasting from somewhere in our heroic fatherland in the year of unity and definitive liberation.

In order to air our broadcasts and guarantee the safety of this instrument of the people, we announce the following:

The people should look for our broadcasts on Tuesdays or Fridays at 1230 or at 1800 understanding that those are our station's fixed transmission days regardless of the fact that on certain occasions, for reasons beyond our control, we may not go on the air those days.

CSO: 5500

NICARAGUA

GOVERNMENT INSTALLS RADIO STATION IN LA TRONQUERA

PA231616 Managua BARRICADA in Spanish 11 Jan 80 pp 1, 6 PA

[Excerpt] The voice of the revolution is now being heard in large sectors of the Atlantic and Zelaya after officially inaugurating the people's first radio station last Tuesday in La Tronquera. Commander Daniel Ortega, member of the Junta of the Government of National Reconstruction, presided over the ceremony which ends decades of opprobrious silence and starts the historic renaissance of our Miskito, Sumo and Rama brothers.

The relay station of the Voice of Nicaragua was provisionally installed in a camper 108 km from Puerto Cabezas after a series of difficulties were overcome. The camper formerly owned by Somozists has been named after Commander German Pomares Ordonez.

The 10-watt station [as published] with a 350 ft antenna, will transmit in Miskito and Spanish from 0500 to 2000. The programs are aimed at farm workers, our Sandinist People's Army (EPS) units stationed there and Nicaraguans in general.

The station which cost 500,000 cordobas is run by Pepe Ruiz, director; Carlos Gallo, production manager; Cristobal Alvarez and Margarita Matamoros, announcers; and Frank Cortez, technician.

First television came to Bluefields and now radio has come to La Tronquera, one of the most remote places in Nicaragua which bases its livelihood on the resin obtained from pine trees.

"The idea of setting up a radio station on the Atlantic coast, the same as the television, was included in the declaration of principles of the Sandinist National Liberation Front (FSLN) National Directorate, long before the victory of the revolution."

Commander Daniel Ortega Saavedra stated this during the radio station inauguration ceremony.

"Somoza, the exploiters and the companies, all that gang, all they did was to take lumber from this region," Ortega indicated.

As a matter of fact, the area between Puerto Cabezas and La Tronquera which used to be teeming with big green pines is now a desolate sight due to the merciless deforestation carried out by Somozism. He also said: "In the same manner they took the gold leaving behind poverty, hunger and exploitation."

"They took away our sea wealth and in exchange they left disease and illiteracy. All they cared about was exploiting our resources," Commander Ortega added.

"Now we are free to build our own future; however," he added, "this means that we all must work, the ministers, the EPS, the workers, the Farm Workers Association, the Miskito, Sumu, Rama, Sandinist Unity and other organizations."

"Only united can we overcome our difficulties. We have urgent problems here, such as the shortage of rice, beans and other commodities, in order to carry ahead the process," Companero Ortega asserted.

In conclusion he said: "We have to solve those problems together and not as individuals and we must carry this out in an organized manner."

CSO: 5500

BRIEFS

TELEPHONE, COMMUNICATIONS RECONSTRUCTION--Federico Lopez, deputy director of the National Telecommunications and Postal Directorate [Telcor], has stated that the main objective of this institution is the reconstruction of telephone networks. In 1980, the main objective of Telcor will be to reconstruct the telephone networks and centrals that have been destroyed, Companero Federico Lopez said during a news conference this morning. The centrals in Chinandega and Matagalpa and networks throughout the country will be rebuilt. There are also plans for extending telex networks to facilitate communications in our country. Telcor also has social projects. Most important in this regard is its commitment to the revolutionary government and the national leadership of the Sandinist Front to join the Atlantic coast to the national communications system, Companero Lopez said. In this regard, a big step has been taken with the installation of television on the coast. It is probable that in May, telephones will be installed. Companero Lopez stated the main problem in Managua is the reconstruction of networks because they are in very bad condition. For this reason a large number of cables are being imported. They are in such poor condition because during the Somoza era, repairs were made but networks were not replaced. As a result the networks have deteriorated and now Telcor has to replace them, Companero Lopez noted. [Text] [PA221824 Managua Radio Sandino in Spanish 0300 GMT 22 Jan 80 PA]

CSO: 5500

INTER-ARAB AFFAIRS

BRIEFS

YAR-PDRY UNIFY COMMUNICATIONS SERVICES--Sana, 31 Jan--The two parts of Yemen have agreed to coordinate their cooperation in the fields of postal services, air transport and telecommunications. The two sides issued a statement here today in which they agreed to apply an internal tariff for postal services that are in use in both the YAR and the PDRY as of 15 February. The statement, which was signed by the ministers of communications in both parts of Yemen at the end of their talks over the last 2 days, points out that the two sides are now formulating the basic principles by which render the postal services between the two parts an internal service and to coordinate the exchange of postal stamps. The two communications ministers agreed to increase telephone channels from 6 to 12, to operate the telegraph service between the two parts, to install a new microwave network, to complete studies with regard to establishing the Aden-Taizz microwave project and to use a unified area code for telephone services in the two parts. The statement asserts that the two sides also agreed in principle to restore air transport between the two parts. [Text] [JN311810 Baghdad INA in Arabic 1710 GMT 31 Jan 80 JN]

CSO: 5500

BRIEFS

ANOTHER ILLEGAL TRANSMITTER--Beirut, Jan. 23--Lebanon yesterday received its sixth illegal radio transmitter since the civil war when a station calling itself Voice of the Arab Revolution went on the air. The station is operated by the dissolved Lebanese Arab Army (LAA) which cooperates with the Palestinian guerillas and leftwing militia. The LAA emerged at the time when the regular army disintegrated in 1976 and Muslim units fought on the side of the Palestinian guerillas and leftwing militia. The LAA controls among other places a part of western Beirut which is run by the leftists and the guerillas. In addition to the various official radio stations and the latest LAA transmitter, several organisations maintain illegal private station. These are: The Voice of Lebanon (rightwing Falangist Militia); Voice of Arab Lebanon (Nasserist Militia); Voice of United Free Lebanon (the Marada Militia who are at odds with the other rightwing Christian Militia groupings) and the Voice of Hope belonging to the dissident Christian Lebanese forces which cooperate with Israel.--DPA [Text] [Karachi MORNING NEWS in English 26 Jan 80 p 3]

CSO: 5500

SIERRA LEONE-LIBERIA DIRECT DIAL TELEPHONE LINK

London WEST AFRICA in English 7 Jan 80 p 44

[Text]

The Director of the Norwegian Company NERA, which is constructing a direct telephone dial link between Sierra Leone and Liberia, Mr. Bjorn Stadel, said in Freetown that when the entire project is completed by February it would afford Sierra Leoneans the opportunity to dial direct to Liberia and to other African countries. Mr. Stadel said that the project will also permit television linkages between Sierra Leone, Liberia and the Republic of Guinea and other neighbouring countries.

He added that with the efforts of a Japanese company working on the Liberian side of the border, Sierra Leoneans would soon be able to get television signals from as far as the Ivory Coast.

CS0: 5500

INTER-AFRICAN AFFAIRS

BRIEFS

NIGERIAN 'VOICE OF ISLAM'--The Moslem community in West Africa is to set up a radio station in Nigeria for the propagation of the message of Islam. The station, to be known as the "Voice of Islam," will broadcast news about Islamic achievements and those of its adherents to the peoples of the sub-region. A spokesman for the group undertaking the project, Chief [name indistinct], gave the news at the laying of the foundation stone of the mosque at Ilesha in Oyo state. The proposed radio station will serve as a school for the education and enlightenment of people in the West African subregions. [Text] [LD281248 Lagos International Service in English 0830 GMT 28 Jan 80 LD]

PAN-AFRICAN NEWS CONFERENCE--The Pan-African News Agency conference ended yesterday in the town of Lobito after a 3-day session. The report of the final council underlines the agency's objectives to disseminate information and news serving development of the African countries and to organize the exchange of information within Africa. The monopoly of imperialist news agencies still existing in many countries on the continent must be broken, it said. This course requires [word indistinct] and extension of national agencies. According to the report there are national agencies only in (?26) of the PANA member countries of which merely the half had the technical prerequisites for transmitting broadcasts abroad. The report also states that the agency is to launch its activities from mid next year and not in 1980 as was proposed by PANA Secretary General Cheik Ousmane Diallo. The participants adopted resolutions on the structure and work of the agency and they have (?again talked) on the financing of the body to be deliberated by experts in the meeting which takes place in Dakar next month. (?Live) debates over the agency's financing questions are scheduled for April this year. The closing session was presided over by Comrade Lucid Lara, chairman of the conference, Central Committee secretary for propaganda and information and member of the political bureau of the MPLA [Popular Movement for the Liberation of Angola] Labor Party. [Excerpt] [AB221500 Luanda Domestic Service in English 1130 GMT 22 Jan 80 AB]

PAN-AFRICAN TO BEGIN OPERATIONS--Freetown, 2 Feb (MAP)--The new "Panafrican News Agency" (PANA) will begin functioning next July, on the occasion of the Organization of African Unity (OAU) Summit to be held here. The sixteen African countries, founders of PANA, decided that it will be composed of a pool of African press agencies and information organs, in order to essentially "defend the interests of each country without becoming the equivalent of a supranational structure." On the other hand, a committee for the immediate study of financial problems related to the rapid launching of journalistic activities was created in Lobito, Angola. Political questions will have the priority over all other information. To this effect, the Angolan information official, Lucio Lara, elected president of PANA's Executive Committee for two years, affirmed that "the agency will be above all, an instrument for the liberation of African peoples and the defense of the dignity of all the continents." PANA's Executive Committee includes representatives of many countries among which are Morocco, Algeria and Sudan. [Text] [LD021622 Rabat MAP in English 1302 GMT 2 Feb 80 LD]

CSO: 5500

GHANA

BRIEFS

JAPANESE FINANCING FOR TV EXTENSION--The Ghana Broadcasting Corporation is to extend its microwave television service to the Northern and Upper Regions at a cost of over £40m. Mr. J. L. Mills, deputy director-general of GBC in charge of technical and engineering services, announced this when receiving a three-man survey team of the Japanese International Co-operation Agency (JICA) who were on a four-day visit. Mr. Mills said feasibility studies for the project had been completed in 1973, and that the Japanese Government was considering financing it. Mr. T. Kawai, chief of the training section of the International Co-operation division of the Japanese Ministry of Posts and Telecommunications, presented GBC with a camera worth £1,800. [Text] [London WEST AFRICA in English 28 Jan 80 p 178]

CSO: 5500

MAJOR PROGRAM TO IMPROVE TELECOMMUNICATIONS BEGUN

Nairobi DAILY NATION in English 23 Jan 80 p 3

[Text] A major programme to improve local and international telecommunications has begun.

In an interview with the NATION. Kenya Posts and Telecommunications services director Mr. T. P. Kiambi, said the corporation had already ordered equipment worth about Sh 540 million to improve the services.

Some of the equipment which would greatly speed up international dialing, was about to arrive in Mombasa. This particular equipment was tied with the Pan Africa telecommunications network, but would arrive in the country within the year, Mr Kiambi said.

The ambitious programme would include the installation of STD equipment in areas such as Malindi, Meru, Embu, Kisii, Kericho, all main provincial headquarters and all places which ought to be automatic by now but for lack of funds.

Nairobi would also benefit greatly from the programme, which will relieve the central area of thousands of lines which at the moment are used to serve people in Milimani, Parklands and Eastleigh.

Within four years, the corporation would be able to double the current 60,000 direct telephone lines, Mr Kiambi said.

He said the new orders were placed following financial assistance from the International Bank for Reconstruction and Development.

In addition, he said, there was a credit to the Kenya Government from Japan and other smaller agencies to help develop Kenya Posts and Telecommunications within the current development plan period, which ends in 1983.

Mr Kiambi said it may have appeared that the Kenya Posts and Telecommunications were doing nothing.

But he added: "The demand for telecommunication services has risen beyond expectation."

On telecommunications development in Nairobi Mr Kiambi said Nairobi Central would be greatly relieved when an exchange, which will have 3,500 lines, was installed at Milimani. Already, he said, the building for this exchange was ready and the corporation was waiting for the equipment only.

The Milimani exchange would be ready in about a year and would serve the whole of Milimani, which is now served by Nairobi Central, Mr Kiambi said.

The corporation was also doing something about Nairobi South, which includes the whole of the Industrial Area, Mariakani and Nairobi South "C" and "B."

A building was nearing completion for an exchange of 6,000 lines, and an exchange was also planned for Nairobi South.

CSO: 5500

USSR

BRIEFS

DALNERECHENSK TV FACILITIES--According to the chairman of the Dalnerechensk Gorispolkom a stomatological polyclinic and a city hospital with 200 beds were commissioned in the city last year. The city's dwellers have been provided with reliable television broadcasting from the powerful radio relay station which was built last year and presently equipment for the second program is being installed. The area of residential housing in the city increased by 30,300 square meters last year. Construction of the city's information computing station was completed. [Vladivostok Domestic Service in Russian 0930 GMT 14 Jan 80 OW]

CSO: 5500

STATUS, EXPERIMENTAL TESTING OF VIDEOTEXT

Cologne ONLINE in German Nov 79 pp 1012-1013

[Article by Günter Sandscheper]

[Text] Human aspects occupied the foreground in the Munich Congress on "Human Telecommunications." This Congress was founded by the Munich Group, an association of scientists and industrial representatives. They intended to raise the question whether misguided developments, such as have occurred e.g. with energy media, can be avoided. The meeting is oriented towards mass communications against the background of novel media, and thus must run into political conflict. Various special interests are contesting over the new media, for example the NDR (North German Broadcasting), as is known from the daily press. For this reason, the possible popularization of the new media as well as their utilization should be discussed here.

New communications media are imminent. They were initiated in practice by the 1976 report of the Commission for the Expansion of Technical Communication Systems (KtK). Within the next year, in the Duesseldorf/Neuss area, a major experiment with display screen text, will take place, and it will involve about 3,000 participants. The KtK recommended not only the expansion of conventional telecommunication services, which is to say the telephone network, but also cautiously recommended to take the step towards the new media in two stages.

The participants of that time in part coincide with the members of the Munich Group. None of them was able to foresee the social implications caused by the new media. Pilot projects were implemented in Duesseldorf by the German Post Office, and cable TV was tried out in Berlin, Dortmund, Mannheim/Ludwigshafen, and Munich. These pilot projects were intended to show the effects which such enterprises would have on the general configuration of media and on the utilization of these media. Because of political and financial contingencies, the cable TV experiments have been delayed, but the display screen text experiment is in progress.

The Citizens of Duesseldorf and Berlin Will Test the Display Screen Text

The Duesseldorf/Neuss project envisions 2,000 subscribers, chosen according to demographic perspectives. To these will be added 1,000 users from the more professional areas. In Berlin too, a demonstration test will involve 2,000 subscribers, but no representative population structure will be sought; rather, the subscribers will be registered at their own initiative.

In Berlin, in 1977, at the Broadcasting Exhibition, the German Post Office for the first time presented display screen text, and the broadcasting organizations presented video text. As a reminder: display screen text involves coupling an expanded television with remote control, through a modem, to the telephone network. Through the connection, and by means of a keyboard, the text information stored in a display screen text central, can then be called, for example with numerical codes or the like. The quantities of information are unlimited.

With video text, a transmitter radiates a fixed number of display screen contents within the blanking interval of the video image. The blanking interval is the recurrent free space between two images, which sometimes appears as a black bar on the screen. The user can have access to the information broadcast during this interval.

Both inventions are of British origin. For this reason, these inventions are being offered there in the broadest scope by the various existing services. As presented in Munich, the British user of these technologies can today access more than 100,000 pages of information. The content of this information extends from simple practical directives concerning messages right up to scientific contexts. Commercial publishing houses are among the suppliers.

Commercial Utilization of Display Screen Text Is Beyond Question

Independent of political disputes, and regardless of the various interest groups behind them, the opinion prevailed in Munich that commercial utilization of display screen text was beyond question. For example, banks in Germany already intensively include the new medium in their considerations. The like holds for shippers and publishers.

Display screen text should have quite significant effects upon the future forms of data processing services. The display screen text can make available to the clientele of the computer centers "display screen masks" delivered directly into their homes. These are filled out with data, for example the evening. When desired, the figures processed in the computer center can again be recalled to one's own display screen at any time.

Technically, the matter is simple, since the necessary television sets are available. But the questions concerning media laws, data protection, and

utilization are critical. The media laws are at least striving for a solution with the display screen text, even though in Munich these were sometimes perceived as curios. In this connection, one recalls the special laws which are necessary in Nordrhein-Westphalia and in Berlin.

The data protection question is generally unclear, and Munich provided no additional insights on this point. As far as utilization is concerned, however, we can fall back on the extensive British experience. In view of the British information, Professor Eberhard Witte, founder of the Congress, and Chairman of the Munich Group, and likewise Chairman of the KtK Communications, was able to state that the Federal Republic of Germany is engaged in a "developmental stage of media politics".

The Munich Congress reached its high point in presenting media acceptance and possible forms of utilization. The engineers contributed only little to the situation. An evening panel discussion led by Professor Karl Steinbuch likewise yielded no new conclusions. It was too rigid and the questions it addressed were too heterogeneous. The one woman on the panel, Gisela Scheloske, was Business Manager of the Association for Text Processing and she made the only valuable contribution. She demanded uniformity of keyboards and functions between the text acquisition units and typewriters, better education already in vocational schools, collaboration of the involved persons in the acquisition process, and a training time of about four weeks.

The British Post Office operates a Prestel Service, a parallel to the display screen text. Tom Stewart, of Butler, Cox & Partners, London Consulting Firm, discussed a study on the use aspects of this service. He regards this new service as a radical deviation from the role which television has played up to now, including modifications by the video recorder, the picture disk, subscriber television, or the return channel.

In the British Prestel Service, 160 organizations, one-third of them publishers, offer information on a commercial basis. Access to the offerings of these organizations, via television and remote operation, at first appears simple. But an essential role is played not only by the experts of device engineering, but by methods of indexing and access. In the present case, both of these factors are regulated by the British Post Office. The alternatives are presented, like bills of fare, and the user runs through a tree structure while making his selections, in order to arrive at the desired detailed information.

The British Post Office wanted to find out whether these procedures are as simple as they appear, and what effect they have on the user. It therefore had studies performed at Loughborough University of Technology, using 60 test subjects that were selected on a representative basis.

The test comprised six typical information recovery procedures: the already utilized bill of fare procedure, access through key words with a slightly changed keyboard, use of printed directives and an alphabetical index. The results were the following: The ultrasonic remote operation units proved to be too slow; the keyword method was the most rapid for most tasks; furthermore, the printed use directives reduced the number of page accesses, and the user therefore attained the desired objective quicker and at a lower fee. The bill of fare method, which is already being utilized, proved superior to an alphabetical index, although it seems capable of still more improvement.

The discrepancies in accessing individual points of information were immense among the test subjects. Some people found the desired information in seconds, while others required "many tens of minutes." The operating keyboards resembled those of hand computers, and generally proved too small. Covering these keyboards even more with directions for key words is inappropriate. The possibility of "browsing" through the data bank and of linking several items of information still appears problematical today. But for later commercial application, this feature is absolutely necessary. Another important problem lies in the fact that today one must frequently jump back and forth between individual pages, which seems hardly possible without making notes.

In view of these results, it is not surprising that the German Post Office, together with the Institute for Communication Sciences and the Infratest Media Research Organization in Munich, had a representative study performed with random samples. It was supposed to represent possible use aspects relative to personnel and households.

The first result was that the display screen text does not encounter a society with a dearth of information but with an excess of information. Consequently, there is little hope that this new medium will make a rapid conquest. This is indicated by the low use of telephone announcement services, telephone shopping, the high valuation of personal communication, the low popularity of more complex information search facilities, the rare occurrence of demanding filing systems, the private use possibilities of the telephone and perhaps later the display screen text on the job, the presence of psychological barriers, as well as the problem of collision with television or telephone utilization by other members of the household. To this must be added that existing media provide good coverage of important information areas.

Nevertheless, as Professor Wolfgang R. Langenbuscher explained, there also exist positive indices. This is especially true for the potential of the display screen text to optimize individualized, specialized information searches. A core target group of 15 percent of the households reported a corresponding need. Preferred information areas are emergency services,

counselors for everyday problems, and hobbies. Other component areas are local information, data on restaurants, nightclubs, and discotheques, as well as information on bookstores and libraries.

The Chances of the New Technology Depend on the Suppliers of Information

The market researchers are coming to the conclusion that the chances of the new technology depend essentially on whether or not the suppliers of information, in such a service, will design their offering more as a substitute for previous technologies of information supply. The study could not confirm the extent to which utilization of the new medium will offer stimulus for its utilization. The core target group is primarily recruited from the middle and upper class, who already use media intensively.

The market researchers draw from this the conclusion that new media will aggravate the information gap between the upper and lower social strata. This point is also involved in the political fight about the desirability of new media. Dieter Stolte, Program Director of the ZDF (Second German Television) states: "A large number of programs does not imply a large scope of utilization." Little is therefore as yet known about acceptance, so that the Munich Group will still have various problems to solve at its future meetings. Professor Witte nevertheless thought: "No fear of telecommunications." Such things would in any case enter the everyday professional world. He regards the positions of the politicians not so remote as they might appear to outsiders.

8348

CS0: 5500

FINLAND

FINLAND BECOMES FIRST OF NORDICS WITH OPTIC PHONE CABLE

Helsinki HELSINGIN SANOMAT in Finnish 15 Dec 79 p 14

[Text] "Hello. This is Harva. Your voice sounds bright." At the other end of the line was Kari Kairamo, general manager of Nokia Inc. Speaking was Martti Harva of the Helsinki telephone system.

Part of the call actually was transmitted by light. The Hameenkyla telephone district has installed a glass cable which carries calls just like the familiar copper cable. The cable is only 1 kilometer long, as it is still experimental. The average telephone user will not be aware that his words are being transmitted by light; if you called Odilampi or Vanhan-kartano yesterday afternoon, you may have gotten in on the transmission of information by light.

The optic cable is made of glass fibers one-tenth of a millimeter in diameter, which is insulated just like other cables. It has certain advantages over ordinary electrical cable. Lightning and other electromagnetic disturbances have no effect on it, and its capacity for data transmission is almost unlimited.

Matti Nurminen, an engineer with the Helsinki telephone system, says that data transmission speed is limited only by current switching equipment. Densely populated areas will have to change to optic cable because with present technology, it is the surest way to transmit large amounts of data.

Finland is the only Scandinavian country with an optic cable installed in its telephone network. The same technique is being used in the United States, Canada, England, Japan and others.

Optic cable is based on the principle of total reflection; in other words, light traveling nearly parallel to a surface does not escape through the surface to the outside. For this reason, light remains inside the glass fiber and can escape only at the end of the cable. The speaker's voice is transmitted by altering the intensity of the light according to variations

in the sound. To that extent it is similar to current telephone technology, in which variations in sound are transmitted as fluctuations in an electrical current.

The Hameenkyla optic cable operates on a wave length of 850 nanometers. To be exact, it is not light; it is not visible to the human eye since it is in the infrared range.

9551

CS0: 5500

FINLAND

TELEVA EXPANDS, TO DELIVER PHONE EXCHANGES TO USSR

Helsinki HELSINGIN SANOMAT in Finnish 15 Dec 79 p 28

[Text] In a surprise move, Televa Inc., a producer of data transmission electronics, has expanded its work force. At the beginning of the summer, there were fears of layoffs at the Aankoski and Espoo plants, but now it is reported that there are 120 more employees at Aankoski than at the end of the summer.

Approximately 100 of the new employees are covered by a contract which will expire at the end of September, 1980. It will be extended if the employment picture remains stable and if, for instance, additional orders for telephone switching equipment are received from the Soviet Union.

A contract has been signed with a new supplier in Konnevesi, about 30 kilometers from the Aankoski plant. Kellankosken Voima will begin production at the beginning of next year, when 10 employees will begin manufacturing various electrical conductors for Televa telephone equipment.

"Televa is getting into some new fields of export. Our stool now has three legs, where before it had only one," said General Manager Olavi Kanerva in Aankoski Friday. Televa's stool was one-legged when its only customer was the Postal and Telegraph Administration. Next year there will be two additional substantial customers, each providing a third of the business: IBM of Sweden and the Soviet Union, which has ordered two 10,000-number telephone exchanges for next year.

The Soviet order was obtained by Telefenno, a marketing and product development company operated jointly by Televa and Nokia, Inc. The Soviet Union's order involves electromechanical technology, which requires more labor than the next generation of telephone equipment. IBM/Sweden's order involves computer technology, which requires 25 percent less workers, according to Kanerva. Part of the work will be done by component producers in other countries.

The Tampere telephone system has also placed a major order for digital or computer technology. Systems orders amounting to 50 million marks will be

manufactured primarily in Televa's Aankoski plant. A new police radio network which will cover all of Finland within 4 years will also provide work for Televa's plant in Aankoski.

According to Kanerva, production and sales are increasing faster than employment because computer technology is displacing electromechanical technology. Televa plans to transfer its telephone production division to Aankoski. The Aankoski plant would become more independent and would expand its operations.

Televa's Aankoski plant is planning a third expansion phase, but timing will be decided when it can be determined if present developments will be permanent. The company presently employs 388 workers at Aankoski, which will increase to 400 after January 1. This will mark fulfillment of a gentlemen's agreement made between Televa and the city on 12 December 1973, according to city manager Veikko Heiskanen. Televa promised to employ 400 to 500 employees in Aankoski by 1980.

9551

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FINLAND

TAMPERE DIGITAL PHONE EXCHANGE

Helsinki HELSINGIN SANOMAT in Finnish 13 Dec 79 p 37

[Text] Finland's second largest private telephone system, Tampere Telephone Cooperative, has tentatively agreed to sign a contract with Telefenno for loop and terminal exchanges and concentrators, equipment representative of the latest in digital technology.

The contract, which will be signed in March, also includes pulse code modulation transmission equipment. The order will amount to nearly 50 million marks.

The systems to be produced by Telefenno will accommodate about 40,000 subscribers. Part of the equipment will also handle Tampere district internal through traffic. The first systems in use will be the Kangasala and Nokia exchanges in 1982.

The systems are the product of digital computer-directed technology developed entirely in Finland. The same technology was used in the development of the Helsinki telephone system and a 15,000 number system ordered from Telefenno in September.

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FINLAND

BRIEFS

ERICSSON, TELEFENNO CONTRACT--LM Ericsson and Telefenno will produce 15 million marks worth of voice transmission and switching equipment for South Bothnia Telephone. With the acquisition of this equipment, the telephone company will be able to complete necessary expansion of its 31,000 subscriber exchange. [Text] [Helsinki HELSINGIN SANOMAT in Finnish 9 Dec 79 p 31] 9551

CSO: 5500

TELECOMMUNICATIONS CALLED 'ECONOMIC WEAPON OF FUTURE'

Paris LE FIGARO in French 17 Jan 80 p 6

[Article by Jean-Paul Croize]

[Text] The economic weapon of the near future is an effective telecommunications network. In this sector, France has already made up a large part of the delay in development it suffered at the beginning of the decade. It has done so to the point that the expression "telecommunications a la Francaise" has lost all of its perjorative meaning: in fact, this sector became one of our principal export sources in 1979. And one of the principal hopes for the upcoming years, as it was put yesterday by Norbert Segard, secretary of state for Posts and Telecommunications [PTT] as he explained the development plan of the National Center for Telecommunications Studies (CNET).

"The acceleration in technical progress, the growth of international competition and the need for permanent industrial recovery call for the strengthening of the efficiency of our capabilities in the sector of new technologies," Segard emphasized, while recalling the most concrete aspect of CNET reform: its fractionation into five research centers distributed among laboratories located in Paris, Lannion and Grenoble.

The principal example is space telecommunications: by launching TELECOM I at the end of 1982, France will be the first European country to have a satellite to handle its domestic needs; and above all it will become the only nation in the world, except for the United States, to have a satellite capable of handling high capacity communications between computers, thus offering an alternative to those who feared that currently America has an absolute monopoly in the sector.

However, telecommunications technology [telematique] is not forgotten in the PTT plan. When he laid the CNET cornerstone in Grenoble in October 1979, Segard expressed the wish that this research center--specializing in electronic components--would in time transform the region into a "silicon valley," analogous to the Silicon Valley in California where modern micro-information technology was born.

Brittany is another region principally concerned. Taking Lannion first, the CNET laboratories are at the point of research in two basic sectors: optical fibers which are being used to replace classical wires because of their 'nfininitely higher capacity and word synthesizers which should permit computers to talk to one another directly in a few years, as well as construct articulate sounds to answer us.

Next comes Rennes where the Joint Center for the Study of Telecommunications and Television (CCETT)--after the TDF passes under the authority of the PTT-- is to continue to bring television and telecommunications closer together, an equally important trend in this sector, as demonstrated by the birth of the ANTIOPE or TELETEL [expansions unknown] devised by CCETT research personnel.

Finally, as the last aspect of the CNET reforms, the secretary of state announced the establishment of two entities yesterday: an agency for technological evaluations whose mission will be "to permanently follow developments in technology" and "to compare the quality of French and foreign work." A consultative scientific committee was also established made up of personalities outside the ministry of the PTT who will have the formidable mission of determining the orientation telecommunications should be given in the future.

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CSO: 5500

TELEVISION BROADCASTING TO BE RESPONSIBILITY OF PTT

Paris LE FIGARO in French 10 Jan 80 p 6

[Article by P. Z.]

[Text] This time the PTT [Secretariat of State for Posts and Telecommunications] is entering smack-dab into the telecommunications technology [telematique] century. On the one hand, a subsidiary of France-Cables--under the aegis of the administration--the General Telephone Company, is recruiting "supersalesmen" to sell telecopiers to companies. At the same time, yesterday morning's JOURNAL OFFICIEL published a decree kicking off the "video-conference" experiment between four big French cities. Finally, the Secretariat of State for PTT is regaining authority over the TDF [Telebroadcasting of France] by delegation of the prime minister, which at one point in time was considered to have been promised to the Directorate General of Telecommunications. Doubtless this is a disappointment for Gerard Thery who, by means of this acquisition, was thinking about controlling a good part of the communications in France.

Yesterday morning, the Council of Ministers decided that the TDF would be attached to the PTT. However, that does not mean that the administration is going to absorb the organization. The TDF will, in fact, continue to be under the responsibility of its council of administration, while in Norbert Segard's cabinet a small, "three-man" unit will reportedly be installed to assure administrative supervision. Therefore, it is not a question, for the moment, of the government's becoming involved in television and programs through the PTT.

What is the TDF? Expanding the acronym, Telebroadcasting of France, is a formidable machine, whose president is Jean Autin, with Maurice Remy as director, employing 3,200 persons. The TDF manages six radio networks, with transmissions handled by 312 transmitters; three television networks, with their 325 transmitters and 5,270 retransmitters; and about 55,000 km of Hertzian links [voies]. Added to this is the management of an earth station for communication via satellites.

Moreover, the TDF has responsibility for several maintenance, engineering, financial or technical assistance subsidiaries. It also has its own laboratory in Rennes, which was set up with the National Center for Telecommunications Studies.

The revenues of the TDF are produced by leasing its installations, particularly to French television networks, as well as to Radio-France. Its investment possibilities appear relatively reduced: a little over 425 million francs. On the other hand, the 4-year old effort to give the country color TV coverage requires additional money. That is why there was once consideration of attaching the TDF to the Directorate General of Telecommunications. The TDF would have been able to utilize the important resources of the telephone sector which, next year, will produce in excess of 10 billion francs.

In reality, the government made a political choice coupled with a desire to establish better coherence in the system. The PTT, like the TDF, is responsible for transmitting signals by wire or Hertzian links, whether for the purpose of the telephone, facsimile, data transmission or television.

The Council of Ministers is maintaining the state monopoly intact and is responding to the warnings of the political parties. Finally, the TDF, which is being called upon to play a part in the construction of the French-German direct television satellite, responds to a political ambition. Such decisions cannot be made solely by several engineers but by a government and therefore, by its representative, namely the minister of the PTT.

Video-Conference in Two Years

At the same time, the JOURNAL OFFICIEL informs us that for a period of two years the PTT will conduct a "video-conference" experiment in France. From studios installed in Paris, at the Baujon telephone exchange (near rue du Faubourg-Saint-Honore); Rennes, at the DRT (Directorate of Technological Research) headquarters; Nantes, in the Bretagne tower; and Lyons (the exact site has not yet been designated), company directors and their staffs will be linked by two centers only to start, beginning in March 1980. The prices initially set--in a hookup of from one to four persons, based on the rates applicable to audio-conferences--are only tentative. They are far from covering the real expenses of such an operation. However, the Directorate General of Telecommunications, which is supervising the operation, wishes to proceed in a pragmatic manner. It is conducting a full-scale experiment so that it may subsequently draw conclusions which will be imposed on the basis of user requirements.

These provisional rates are as follows:

--1-year subscription option at 500 francs per hour, with a minimum of 20,000 francs per month;

--reservation option at 800 francs for a 1-hour conference, 1,500 francs for 2 hours, 2,100 francs for 3 hours and 600 francs for each additional hour after the third.

END OF

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Feb 27, 1980

